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# Crowdfunding: some empirical findings and microeconomic underpinnings\*

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## Abstract

This article reviews some recent developments in the study of crowdfunding – i.e., the practice of raising funds through an open call on the Internet. It also shows how microeconomic theory can help us understand some important aspects of crowdfunding that go beyond the finance sphere of the firm. A special attention is devoted to the role and behavior of crowdfunding platforms, which intermediate between entrepreneurs and funders. Throughout the paper, the Belgian market for crowdfunding serves as the main source of illustrations.

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# 1 Introduction

Crowdfunding has recently emerged as a novel way of financing new ventures. The basic idea behind crowdfunding is simple: instead of raising funds from a small group of sophisticated investors, entrepreneurs try to obtain them through the Internet from a large audience (the so-called “crowd”), where each individual provides a small amount. For example, by early 2014, about 8,850 individuals pledged money online through the Belgium-based publishing house Sandawe; together they raised €850,000 to finance several projects of comic books. Sharing a similar business model, Akamusic allowed more than 80 artists to produce and distribute their album. While crowdfunding developed primarily in the arts and creativity-based industries, initiatives have been undertaken in other industries. For example, Angel.me, CroFun, Look&Fin, and MyMicroInvest are crowdfunding platforms that have experienced encouraging successes in raising funds for various entrepreneurial projects. Crowdfunding is naturally not confined within Belgian borders. Massolution (2013) reports that the market for crowdfunding has continuously grown worldwide since its infancy and should exceed \$5 billion in 2013.

While crowdfunding is an umbrella term used to describe the request of funding from many individuals through an online platform, four types of crowdfunding models can be identified. First, crowdfunding can take the form of *donations*, where individuals give money to a given project and are not promised anything in return. Second, the *reward-based model* offers the contributors a non-financial benefit in return for their funding. In many cases, reward models offer the possibility to pre-order the product that the entrepreneur is making. Third, the *lending-based model* offers the possibility for entrepreneurs to act as borrowers, while contributors take the position of lenders. Finally, the *profit-sharing model* is a particular form of crowdfunding model in which contributors receive a share in the profits of the business or royalties of the artist. The latter model may also take the label of “*equity crowdfunding*”, meaning that it implies investments into securities: shares or bonds.

The startling rise of crowdfunding has raised awareness of and interest in its potential. From a public policy point of view, it is now widely agreed that crowdfunding should be promoted as it offers an alternative – and potentially powerful – means for channeling funds towards small innovative firms; these firms are indeed recognized as a leading source of growth and job creation, but are facing difficulties to raise funds from traditional sources, especially since the financial crisis. Yet, it is also admitted that crowdfunding raises a number of important concerns (risk of fraud, misleading advertisings and advices by entrepreneurs and platforms, treatment of payments by platforms, etc). There is thus an urgent need for the adoption of an appropriate regulatory framework concerning the sale of securities, as well as investor and consumer protection.

Within the European Union (EU), crowdfunding is restricted by national regulatory provi-

sions. In Belgium, the Financial Services and Markets Authority (FSMA) published two communications about the regulatory framework applicable to Belgian crowdfunding platforms. These communications specify to what extent crowdfunding initiatives fall under the Prospectuses Act and/or the Payments Services Act. Although very limited political initiatives in Belgium so far have attempted to legalize crowdfunding for equity, only an initiative at the EU level would really open up the market for crowdfunding and level the playing field amongst EU countries. In this respect, the European Commission has launched a public consultation to identify measures that could help to facilitate crowdfunding practices.<sup>1</sup>

The United States are ahead of the game. On April 5, 2012, President Obama signed into law the *Jumpstart Our Business Startups* (JOBS) Act, designed to help small firms start and expand. A key provision of the JOBS Act allows various exemptions for crowdfunded securities concerning, among other things, the number of shareholders that a private company may have, reporting requirements by the Securities and Exchange Commission, and general solicitation.

In this article, we argue that the current regulatory efforts could be inappropriate if regulators overlook two main features of crowdfunding. First, it is important to understand that crowdfunding has implications that go beyond the financial and legal spheres of the firm as crowdfunding also affects the flow of information between entrepreneurs and contributors. In fact, raising money is not the only strong motivation for entrepreneurs. Other motivations for resorting to crowdfunding are seen as equally important; in particular, getting attention (reduced marketing costs) and obtaining feedback (market testing, market validation). Crowdfunding can be used as a promotion device, as a means to support mass customization or user-based innovation, or as a way for the producer to gain a better knowledge of the preferences of its consumers.<sup>2</sup> We argue here that a deeper perspective on these other dimensions might help in our understanding of the dynamics of crowdfunding and enlighten the ongoing debate in many ways. From a research standpoint, we examine how traditional models in microeconomics can be used and extended to account for these dimensions. In particular, we show some preliminary efforts that have been done so far in that direction and articulate open questions.

The second feature of crowdfunding that regulators must take into account (and that has received scant attention so far in the literature) is that crowdfunding is now essentially intermediated by Internet platforms.<sup>3</sup> Crowdfunding platforms assist entrepreneurs in publishing campaigns and collecting funds. Thereby, they facilitate the interaction between entrepreneurs

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<sup>1</sup>See Hornuf and Schwienbacher (2014b), who examine how securities regulation, particularly the exemptions to prospectus and registration requirements, affects the structure of equity crowdfunding platforms, fundraising campaigns of firms, and the type of contributors. See also Cumming and Johan (2013) on demand-driven regulations for equity crowdfunding based on a nation-wide survey in Canada.

<sup>2</sup>A better knowledge of the consumers' preferences may allow the producer to practice price discrimination. We study this important characteristic of crowdfunding in Section 3.1.

<sup>3</sup>Entrepreneurs may manage to collect funds directly online from many people without the help of a third party (see Belleflamme, Lambert, and Schwienbacher, 2013); yet, nowadays, such practice is the exception rather than the rule.

and the crowd of contributors. As the participation of each group is beneficial to the other group, we argue that crowdfunding platforms can be seen as multisided platforms. We then use the recent research on the economics of multisided platforms to gain a better understanding of a number of issues related to crowdfunding platforms (What are their price and non-price strategies? How do they compete? Why do some succeed while others fail?). We also show how these platforms manage to mitigate some of the concerns about uncertainty and information asymmetries that are prevalent in the context of crowdfunding. Hence, crowdfunding platforms have a natural tendency to self-regulation, which suggests that heavy and complex regulation by governments may be useless, if not counterproductive.

We explore these two important microeconomic aspects of crowdfunding in Section 3. Before that, in Section 2, we review recent empirical research so as to highlight a number of stylized facts. We present a number of concluding remarks in Section 4. Throughout the paper, we try to illustrate our findings by using examples from the Belgian crowdfunding scene.

## 2 Recent empirical findings about crowdfunding

This section presents some early research in the study of crowdfunding. To date, important pieces of research shed light on community benefits, quality signals, herding behaviors, geographical constraints, skewness in the distribution of funds raised, and concerns about delivery.

First, *contributors to the crowdfunding mechanism are not regular investors or consumers*. They have other (intrinsic) motivations. In particular, contributors commit capital not just to get monetary compensation, but also because they value non-monetary benefits. Their participation to the crowdfunding mechanism is truly a social activity from which they derive “community benefits” (Belleflamme, Lambert, and Schwienbacher, 2014). Contributors feel that they are part of a community of “special” or “privileged” investors and/or consumers. The nature and the source of these community benefits vary, especially with the form of crowdfunding. For example, community benefits can be tied to the consumption experience (usually the case under reward-based models) or to the investment experience (mostly the case under profit-sharing models). The sources of these community benefits are broad: preferential access to the artist or the entrepreneur (direct communication, voting on specific issues related to project development), token of appreciation (name credited on a CD sleeve or listed on a website), material reward (T-shirt, original drawing, limited edition album, memorabilia).

Second, *contributors respond to quality signals*. In particular, equity crowdfunding is most successful if entrepreneurs are able to reduce uncertainty for potential investors. The empirical study by Ahlers, Cumming, Gunther, and Schweizer (2013) suggests that retaining equity, disclosure of detailed information about risk (e.g., financial forecasts), and internal governance (e.g., qualified board member, proper board structure) are seen as effective signals by the crowd

and enhance the likelihood of funding success. Using the universe of projects on Kickstarter, Mollick (2014) shows interesting correlations between funding propensity and quality signals, as captured by preparedness of project pitches in terms of time and effort.

Third, *contributors react to the actions of other contributors*. Indeed, the amount of capital raised and the length of time in fundraising are partly determined by accumulated capital. On a lending platform, Zhan and Liu (2012) observe that well-funded borrowers tend to attract more funding and find evidence of herding among lenders. On a profit-sharing platform in the recording industry, Agrawal, Catalini, and Goldfarb (2011) show that individuals are more likely to invest if the funding goal is almost reached. Although herding patterns are found in profit-sharing and lending-based platforms, contributor support over time on reward-based platforms – such as Kickstarter – is bathtub shaped. This means that projects typically get a lot of financial support in the early and last weeks of their funding cycle, consistent with bystander effects (Kuppuswamy and Bayus, 2013).

Fourth, *crowdfunding relaxes geographical constraints*. Agrawal, Catalini, and Goldfarb (2011) uncover that artists and contributors on Sellaband, a music-only platform based in Amsterdam, are on average distant by approximately 3,000 miles, suggesting attenuation of the links between spatial proximity and funding. Still, geography does matter at early financing stage. The latter geography effect is driven by investors who have a personal tie with the artist (the so-called “friends and family”). While the latter empirical evidence is robust, the effect of geography on entrepreneurs is less clear cut. Mollick’s (2014) exploratory study contains a very preliminary effort in that direction. It shows that geographic clusters are still apparent in crowdfunding and determine the type of crowdfunded project and the success in raising funds.

Fifth, *funding is highly skewed*. On one hand, the rate of failure is relatively high. For example, by early 2014, Kickstarter lists about 57% of failed projects – that is, not reaching their initial funding goal. During their period of observation on Sellaband platform, Agrawal, Catalini, and Goldfarb (2011) report a more impressive rate of failures: only 34 artists raised the threshold required to access their capital to finance the making of their album – this represents less than 1% of the artists having received at least \$10 via this platform. On the other hand, a small number of project accounts for a very large proportion of funds raised. The 34 successful projects examined in Agrawal, Catalini, and Goldfarb’s (2011) study account for 73% of the total amount invested on Sellaband over the period. Belleflamme, Lambert, and Schwienbacher (2013) drawn similar conclusions from summary statistics of their sample of individually crowdfunded projects. Interestingly, conditioning on sample on successfully (unsuccessfully) funded projects, Mollick (2014) stresses skewed distributions in the dollar amounts by which projects exceeding (not exceeding) their funding goal.

Finally, *fraud is rare, delays not*. While crowdfunding is commonly viewed as a means to fundamentally change the investment and financing process, one of the main concern expounded

by many is the risk of fraud or at best risk of delay in delivering goods and services. The money is usually raised up front and the likelihood that unscrupulous entrepreneurs take advantage of contributors is in theory not negligible. From the technology and design projects on Kickstarter, case of potential fraud is identified in only 14 out of 381 projects, accounting for less than 0.5% of dollars in pledges (Mollick, 2014). However, there are more concerns about the ability of entrepreneurs to deliver on their initial promises. According to Mollick (2014), the majority of products are delivered late. Of the delayed projects, the mean delay is 2.4 months. Empirical tests also suggest that larger projects tend to have longer delays than smaller projects. Two reasons can be advanced to explain the evidence that many entrepreneurs struggle to meet deadlines in delivering their product: (1) entrepreneurs tend to be overoptimistic about outcomes,<sup>4</sup> and (2) when unexpected success occurs, entrepreneurs may face a range of problems such as shipping and manufacturing problems, changes in scale and scope, administrative/certification issues.

These early findings give important insights into the dynamics of crowdfunding. However, many questions remain open. In addition, establishing causality and identifying transmission mechanisms are surely the main challenges of future empirical work. In what follows, we argue that further theoretical developments may stimulate and also help empirical research related to these issues.

### 3 A microeconomic perspective

This section offers some theoretical support for the empirical findings described above. First, we present the microeconomic foundations of the entrepreneur's choice between various forms of crowdfunding. Second, we discuss the roles and strategies of crowdfunding platforms, which intermediate between entrepreneurs and contributors.

#### 3.1 Choosing the right crowdfunding form

Belleflamme, Lambert, and Schwienbacher (2014) build a stylized model to understand what drives an entrepreneur to choose between the two main forms of crowdfunding, namely the reward-based and the profit-sharing models.<sup>5</sup> To make the comparison as neat as possible, the two crowdfunding models only differ in two key aspects; all the other features of the modeling framework are common. In particular, it is assumed that the entrepreneur must raise a given amount of capital to launch her project; the cost of raising this capital is set, without loss of generality, to zero irrespective of the form of crowdfunding that is chosen. In other words,

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<sup>4</sup>This tendency is well documented in psychology. Indeed, most people display systematic planning fallacy (Buehler, Griffin, and Ross, 1994) and unrealistically rosy views of their abilities and prospects (Weinstein, 1980).

<sup>5</sup>See also Sahm *et al.* (2014), which slightly corrects (and, thereby, simplifies) the analysis.

launching a reward-based or a profit-sharing crowdfunding campaign is supposed to be equally costly for the entrepreneur. It is also assumed that the entrepreneur faces the same crowd of investors/consumers in the two forms of crowdfunding; the crowd has no a priori preference for participating in one or the other type of campaign.

By “freezing” the cost and the participation dimensions, the authors clearly want to focus on another dimension of crowdfunding that they see as crucial, namely the relationship that crowdfunding allows the entrepreneur to establish with the crowd. As indicated in the previous section, this relationship goes beyond the sheer financing objective of crowdfunding and has been understudied so far in the literature. The key argument developed in the paper is that this relationship differs across crowdfunding models. That is, when choosing one or the other form of crowdfunding, the entrepreneur also chooses what she can learn about the crowd and what she can extract from them through the pricing of her product.

Let us be more specific. The reward-based model of crowdfunding that the authors depict is based on pre-ordering: the contributors are consumers who have a strong taste for the announced product and who therefore decide to pre-order it, that is, to pay for it before it is actually produced. The entrepreneur can reward the contributors in various ways, as described above; what matters for the analysis is that these rewards (called “community benefits”) increase the contributors’ willingness to pay for the product. It is assumed that this increase in willingness to pay is proportional to the consumer’s taste for the product; that is, those consumers who like the product the most are also those who value the rewards the most. As a result, this form of crowdfunding allows the entrepreneur to segment her consumers into two groups: the early contributors who signal themselves as high-paying consumers (and whose willingness to pay is further enhanced by the value that they attach to the rewards), and the other, regular, consumers who wait for the product to be put on the market to consider buying it. The entrepreneur can thus price discriminate between these groups, which has the potential to raise her profits as she is assumed to be in a monopoly position for her product.<sup>6</sup> However, the optimal price discrimination scheme may not be feasible if the initial capital requirement is too high. The obligation to finance the capital through pre-sales puts indeed a constraint on the price that can be charged to those consumers who choose to pre-order the product. One understands therefore that the profitability of this form of crowdfunding decreases with the size of the capital requirement.

The profit-sharing model differs with the reward-based model on two accounts. First, the nature of contributions and compensations is different: instead of pre-ordering the product, the crowd is invited to directly provide a fixed sum of money to the entrepreneur and is promised a share of the future profits in exchange. Second, contributors also enjoy community benefits

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<sup>6</sup>We have here a form of behavior-based price discrimination (BBPD) as consumers self-select into one group and are then charged a specific price corresponding to their choice; see, for example, Fudenberg and Villas-Boas (2007) for a general analysis of BBPD and Belleflamme and Peitz (2010, chapter 10) for a textbook treatment.



but it is assumed here that these benefits are independent of the contributor’s taste for the product; this assumption makes sense as contributors are seen here as investors, who may well decide to finance the venture without purchasing the product eventually. The implications of these differences are the following. On the minus side, the entrepreneur is no longer able to segment the crowd and, especially, to single out the high-paying consumers. On the plus side, all individuals value community benefits in the same way, which makes it easier for the entrepreneur to capture this extra value; moreover, this ability to capture the value that contributors attach to community benefits is not impaired by the size of the capital requirement.

The comparison of the profits that the entrepreneur can achieve under the two forms of crowdfunding yields the main result of the analysis: *the entrepreneur prefers the reward-based model when the capital requirement is relatively small and the profit-based model otherwise*. The intuition behind this result has been outlined above: pre-ordering in the reward-based model allows the entrepreneur to practice price discrimination, which should give her a higher profit than in the profit-sharing model (in which she is bound to set a uniform price for her product). However, price discrimination is constrained, and thus less profitable, when the initial capital requirement grows larger than some threshold. Above this threshold, the profit-sharing model, which allows the entrepreneur to turn all individuals into investors, becomes the best option.

## 3.2 Crowdfunding platforms

We focus here on the roles and strategies of crowdfunding platforms, which facilitate the interaction between entrepreneurs trying to raise funds and consumers/investors willing to participate in the financing of new projects. We first identify crowdfunding platforms as “multisided platforms”. Then, we describe the price and non-price strategies that these platforms implement. Finally, we briefly analyze competition among crowdfunding platforms.

### 3.2.1 Multisidedness of crowdfunding platforms

Crowdfunding platforms can be seen as multisided platforms. As Evans (2011) explains it, a business opportunity emerges for a multisided platform when three conditions are met. First, there are distinct groups of customers. Second, a member of one group benefits from having his demand coordinated with one or more members of another group; in the jargon of the economics literature, it is said that each group exerts indirect, or cross-side, network effects on the other groups. Finally, an intermediary can facilitate that coordination more efficiently than bilateral relationships between the members of the groups.

Crowdfunding platforms seem to meet these three conditions. First, they link at least two distinct groups: entrepreneurs (fundraisers) on one side and contributors (funders) on the other

side.<sup>7</sup> Second, each group’s valuation of the platform depends on the participation of the other group(s). As far as contributors are concerned, there are two reasons for which they are likely to prefer platforms with a larger number of entrepreneurs: such platforms provide them with a wider set of campaigns that they can choose to support and, in the reward-based model, such platforms also increase the probability that contributors will obtain rewards that fit their tastes. Yet, another force may play in the opposite direction: the chances that any given campaign will be successful (i.e., will reach the required threshold) are inversely related to the number of campaigns that the platform hosts; for that reason, contributors may prefer platforms with a smaller number of entrepreneurs. We may conjecture that the former effects outweigh the latter (in particular if contributors can find some way to coordinate on projects that are more likely to be successful). It is thus reasonable to say that entrepreneurs exert positive indirect network effects on contributors. The same obviously applies in the opposite direction: contributors exert positive indirect network effects on entrepreneurs: entrepreneurs value platforms that are able to attract larger crowds of contributors as they increase their chances to raise the targeted funds; platforms that attract a larger number of contributors are also more interesting because they allow entrepreneurs to showcase their products and to “test the waters” on a larger scale. As for the third condition, even though entrepreneurs may be able to connect with the crowd by their own means,<sup>8</sup> platforms undoubtedly offer them both higher prospects of success and lower costs. In particular, as we discuss it below, crowdfunding platforms are able to mitigate the problems raised by information asymmetries much more efficiently than any individual fundraiser could do on his/her own.

It is important to note that agents on both sides also care about what the members of their own group do; that is, within-side external effects are also present. Such effects are likely to be negative among entrepreneurs as they compete for the funds that the crowdfunders are willing to contribute: the more campaigns the platform hosts, the tougher the competition. In contrast, positive within-group effects exist among contributors: the project that a particular contributor has chosen to support is more likely to reach the required threshold the larger is the number of contributors who may choose to back this project too.

### 3.2.2 Strategies of crowdfunding platforms

Facing these various cross-side and within-side external effects, crowdfunding platforms use price and non-price instruments to manage participation and usage on both sides of the market. As

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<sup>7</sup>We discuss below the pros and cons of bringing other groups on board. For a deeper analysis of the contributors and entrepreneurs’ respective incentives and disincentives to participate in crowdfunding campaigns, see Agrawal, Catalini, and Goldfarb (2013).

<sup>8</sup>For instance, Verity Price, a South-African singer, managed to crowdfund her first album by appealing to her fans through her own website. See more specifically Belleflamme, Lambert, and Schwienbacher (2013) who analyze a broad set of individual crowdfunding campaigns.

far as *prices* are concerned, what matters for a platform’s profits is not the sum of the prices paid on the two sides but the structure of these prices (see Rochet and Tirole, 2006). In general, a multisided platform that decides to charge a little bit less on one side and to compensate by charging a little bit more on another side, thereby keeping the sum of prices unchanged, is likely to affect its profits in a dramatic way. This certainly applies to crowdfunding platforms. As for now, the vast majority of them only charge the entrepreneur side and let contributors use the platform services for free. One can easily understand that platforms would not achieve the same levels of profits if they lowered the entrepreneurs’ fees and charged, in compensation, a small fee to contributors. It is indeed very likely that any positive fee would discourage many contributors to participate; this would in turn make the crowdfunding platform much less attractive for entrepreneurs, whose willingness to pay would therefore decrease. Subsidizing the participation on one side is often the only way for multisided platforms to solve the so-called “chicken-and-egg” problem: as each group’s participation is conditioned on the other group’s participation, the intermediary has no choice but to let one group use the platform for free so as to initiate a positive feedback loop.

Regarding *non-price instruments*, Hagi (2014) explains the importance for multisided platforms to make the right decisions about the design of the platform (functionalities and features of the platform, which sides to take on board) and about its governance rules (regulation of access and participation). In the case of crowdfunding platforms, design and governance decisions are generally geared to address issues related to information asymmetries. As clearly explained by Agrawal, Catalini, and Goldfarb (2013), crowdfunding faces the two typical asymmetric information problems of hidden information and hidden action, which plague the relationship between entrepreneurs and contributors respectively before (“ex ante”) and after (“ex post”) financing takes place. Ex ante, contributors often lack the necessary information to evaluate correctly how successful the proposed projects are likely to be. This can lead to adverse selection and the well-known “lemon effect” (see Akerlof, 1970): platforms only manage to attract low-quality projects because high-quality entrepreneurs anticipate that they will not be identified as such by the contributors and will therefore fail to raise the capital that they need.<sup>9</sup> Ex post, a problem of moral hazard arises as contributors face difficulties to control whether entrepreneurs exert the needed effort to keep up with their promises; for instance, as indicated in Section 2, delays in product delivery are commonplace.<sup>10</sup>

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<sup>9</sup>Free-riding among contributors may worsen the hidden information problem: because contributors only have a small stake, their incentive to investigate entrepreneurs may be low. As a result, the natural tendency is to wait for the due diligence efforts of other crowdfunders. Such a wait may lead to a mere failure of projects (everyone waiting for someone else to make the first move) or to “information cascades”: as described in Section 2, herd behavior is observed on crowdfunding platforms because crowdfunders take accumulated contributions as a signal of quality (note that a precondition for such signal to be efficient is that early funders carefully screened the proposed projects).

<sup>10</sup>Outright fraud, however, remains rare. It is only recently (in May 2014) that a first consumer protection lawsuit involving crowdfunding was filed in the United States (by the Washington State Office of the Attorney

What strategies can crowdfunding platforms implement to address these problems? A first strategy consist in bringing an additional side on board, namely sophisticated investors (such as venture capitalists, business angels, and institutional investors). Two Belgian platforms have chosen this route: MyMicroInvest allows projects to be funded by the crowd together with a professional venture capitalist; Angel.me has established a partnership with the bank Belfius. The objective is clear: the participation of sophisticated investors is meant to reassure individual contributors; because these investors have much larger capacities and experience to investigate the reliability and success probability of proposed projects, crowdfunders can infer useful information from the choices that these investors make.<sup>11</sup> A potential drawback of this strategy is that it may create conflicts of interest between the two groups of investors. An important empirical question is then to measure the extent to which the two groups complement or substitute each other; Hornuf and Schwienbacher (2014a) make a first step in that direction by focusing on equity crowdfunding and angel finance.

Crowdfunding platforms also design specific rules to reduce information asymmetry. First, most platforms have implemented the “provision point mechanism”, whereby entrepreneurs only receive funds if the total contributions reach (or surpass) a chosen threshold within a certain period of time; as pointed by Agrawal, Catalini, and Goldfarb (2013), with this mechanism, contributors know that they will only provide funds for projects that will eventually raise the capital that they need to be viable. Some platforms also force entrepreneurs, whose projects are deemed more risky, to disclose more information. Others devote themselves more resources to detect potential fraud.<sup>12</sup>

Finally, crowdfunding platforms can tackle information asymmetry by acting as trusted intermediaries. Their objective is to become bearers of reputation and, thereby, effectively certify the quality and reliability of the projects that they take on board. To do so, platforms must carefully screen projects so as to accept only the high-quality ones.<sup>13</sup> The reason is simple: a project accepted on the platform is believed to be of high quality by a contributor unless he/she previously experienced low quality of some other project proposed on the platform; hence, to avoid any stain on its reputation, the platform must keep away from low quality projects. Understanding that, entrepreneurs do not find it profitable to try to have low quality projects funded, implying that only high quality projects are eventually proposed on the platform. In

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General). The suit alleged that the company Altius Management failed to make good on a successful Kickstarter campaign for a card game. In particular, after having collected the money, the company neglected to deliver either the cards or the various backer rewards.

<sup>11</sup>The opposite may be true as well: sophisticated investors may use the “wisdom of the crowd” as an indicator of the potential success of a new product (something that they may have a hard time to evaluate otherwise).

<sup>12</sup>Hardware and product design projects on Kickstarter require further detailed information about the products development and progress. With those projects, entrepreneurs are also constrained in the number of rewards per pledge they can offer (to avoid delay or fraud). In the same vein, the publishing house Sandawe designs its contracts with authors so as to have the exclusivity in the edition of the author’s comic book project.

<sup>13</sup>They should also try, from an ex post point of view, to make sure that funded entrepreneurs deliver on their commitments.

a nutshell, the platform can be trusted simply because it suffices to have one rotten apple in the bag to spoil the rest of them in no time, something that crowdfunding platforms simply cannot afford. In practice, crowdfunding platforms are aware of the importance of acting as trusted intermediaries. For instance, MyMicroInvest publishes on its website a Code of ethics, which stresses the values that the platform itself and the entrepreneurs it selects commit to abide by. Similarly, Frédéric Lévy Morelle, founder and manager at Look&Fin, mentioned in a recent interview about the first year of existence of his platform: *“We have received more than 120 files and if we only kept 5 of them, it was because we wanted to keep our independence and to take the time to select the right projects on which our investors would take a limited risk.”*<sup>14</sup>

### 3.2.3 Competition among crowdfunding platforms

We have explained above that crowdfunding platforms facilitate the interaction between contributors and entrepreneurs, with the participation of each group reinforcing the other’s. The presence of such positive cross-side effects on both sides of a platform is a powerful force towards the concentration of the crowdfunding market: big platforms tend to become even bigger, whereas small platforms face a downward spiral, which will eventually lead them to leave the market. Economies of scale in the operation of crowdfunding services (e.g., due diligence efforts and project screening) further contribute to this “winner-takes-all” market configuration.

However, some forces may play in the opposite direction and favor the coexistence of several crowdfunding platforms. First, we have mentioned above that contributors may have reasons to prefer smaller platforms (i.e., platforms attracting fewer entrepreneurs, thereby raising the prospect for each contributor to be pivotal for the existence of any particular project). We also evoked the negative within-side effects among entrepreneurs: they may also prefer smaller platforms where competition for funds may be relaxed. Second, like in any market, differentiation allows firms to coexist. In the crowdfunding market, differentiation is mostly horizontal: platforms differentiate in terms of business model (e.g., reward-based versus equity), sector of activity (e.g., artistic creations, innovating companies) or geographical basis (e.g., platforms are most of the time region- or country-specific). For instance, on the Belgium crowdfunding market, MyMicroInvest proposes an equity-based model and focuses on new ventures with a clear innovative content, whereas Look&Fin offers a lending-based model.

In view of these conflicting forces and of the fact that the crowdfunding market is still in its infancy, it is hard to predict how it will evolve. It is, however, quite clear that among the 500 or so crowdfunding platforms that were listed in 2013 (see Massolution, 2013), many will quickly disappear because they will have failed to reach a critical mass of either contributors or

<sup>14</sup>Original quote: “Nous avons reçu plus de 120 dossiers, et si nous n’en avons retenu que 5, c’est pour garder notre indépendance, et pour prendre le temps de sélectionner de bons dossiers sur lesquels les investisseurs prendront un risque limité.” [http://www.lecho.be/dossier/techno/Les\\_defis\\_du\\_crowdfunding\\_en\\_Belgique.9389750-7342.art](http://www.lecho.be/dossier/techno/Les_defis_du_crowdfunding_en_Belgique.9389750-7342.art) (published online on August 19, 2013).

entrepreneurs, or failed to find the right business model to monetize the interaction between the two sides. An illustration of such failure on the Belgian crowdfunding market is Akamusic, which created Akastarter to further develop its business model by enlarging its field of activity, but failed to reach sufficient projects to be profitable and allow the continuation of its business. In contrast, it is also likely that platforms that are currently successful will extend their activities. The obvious example is the US-based Kickstarter that now intends to set up in Continental Europe (starting with the Netherlands) so as to enlarge its base of proposed projects (and thereby further fuel the positive reinforcing effects between the two sides of the platform).<sup>15</sup>

## 4 Conclusion

In this article we have first reviewed the early academic literature on crowdfunding. To date, research – mostly empirical – has brought important insights into the role and behavior of entrepreneurs and contributors. No less important though, platforms have received less attention. While early findings on crowdfunding provided significant advances, we think that important theoretical efforts have still to be made to better understand the underlying logic of the dynamics of crowdfunding. After having presented the very first study that goes in that direction, we have then shown how microeconomic theory can help in this perspective. We did so by focusing our discussion on the role and behavior of platforms. In particular, we have depicted how advances in the theory of multisided platforms can be applied to the study of crowdfunding platforms.

As food for thought for future research, we would like to stress the following points. After a few years of existence, crowdfunding is surely becoming an important alternative method of financing for SMEs. We think that two features are instrumental in this development. First, crowdfunding has implications that go beyond the financial sphere: on the one hand, it is a vector by which information can flow between entrepreneurs and contributors (e.g., marketing and signaling dimensions); on the other hand, crowdfunding cleverly leverages the contributors’ *extrinsic and intrinsic* motivations by complementing monetary compensations with community benefits. Second, crowdfunding platforms provide new and inventive ways to match entrepreneurs and contributors, and to reduce information-related market failures.

Clearly, the latter two features have been made possible by the development of the Internet. Therefore, the current success of crowdfunding blatantly shows that the traditional financial sector, concentrated in bodies such as stock exchanges and banks, can no longer ignore the potential of Internet for its future evolutions. Internet is a general-purpose technology that has already triggered a number of important (r)evolutions. Think, for example, of the effects of digital piracy on cultural industries or of the so-called “sharing economy” (with platforms like Uber

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<sup>15</sup>While Kickstarter has been accepting contributors from all over the globe for some time now, only entrepreneurs in the United States, the United Kingdom, Canada, Australia and New Zealand were allowed to actually create campaigns.

or Airbnb) on the transportation and traveling industries. What crowdfunding demonstrates is that similar forces threaten the traditional financial sector as it is now possible to “desintermediate” or “debank” the financial system by letting individuals and firms interact more directly and (at least partially) bypass traditional intermediaries.

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